(Caption of Casterition of the Dockets to Coof Section 125	Office of Regula	tory Staff to Establish ting the Requirements and Additional	PUBLIC SERV OF SOUT	TH CAROLIN	JA
(Please type or print	•		CCD N I	02/0	U-AA-
Submitted by: Address:	Catherine E. Ho		SC Bar Number:		
Address:	Duke Energy C P O Box 1006 /		Telephone: Fax:	704.382.8123 704.382.5690	
	Charlotte, NC 2		Other:	704.302.3090	
		1000		duke-energy.cor	m
☐ Emergency R ☐ Other: INDUSTRY (C	elief demanded in		•	on Commission	's Agenda expeditiously
		Affidavit	Letter		Request
Electric/Gas		Agreement	☐ Memorandum		Request for Certification
☐ Electric/Telecon	mmunications	Answer	Motion		Request for Investigation
☐ Electric/Water		Appellate Review	Objection		Resale Agreement
Electric/Water/	Telecom.	Application	Petition		Resale Amendment
☐ Electric/Water/S	Sewer	Brief	Petition for Re	consideration	Reservation Letter
Gas		Certificate	Petition for Ru	ılemaking	Response
Railroad		Comments	Petition for Rule	e to Show Cause	Response to Discovery
Sewer		Complaint	Petition to Inte	ervene	Return to Petition
Telecommunica	ations	Consent Order	Petition to Inter-	vene Out of Time	Stipulation
Transportation		Discovery	Prefiled Testin	nony	Subpoena
☐ Water		Exhibit	Promotion		Tariff
☐ Water/Sewer		Expedited Consideration	on Proposed Orde	r	Other:
Administrative l	Matter	Interconnection Agreeme	nt Protest		
Other:		Interconnection Amendm	ent Publisher's Aff	ādavit	
		Late-Filed Exhibit	Report		



DUKE ENERGY CAROLINAS, LLC 526 South Church St. Charlotte, NC 28202 Mailing Address: ECO3T / PO Box 1006 Charlotte, NC 28201-1006

CATHERINE E. HEIGEL Assistant General Counsel 704.382.8123 OFFICE 704.382.5690 FAX ceheigel@duke-energy.com

March 7, 2008

Mr. Charles L. A. Terreni Chief Clerk/Administrator The Public Service Commission of South Carolina P. O. Drawer 11649 Columbia, South Carolina 29211

RE: Petition of the Office of Regulatory Staff to Establish Dockets to Consider Implementing the Requirements of Section 1251 (Net Metering and Additional Standards) of the Energy Policy Act of 2005

Docket No. 2005-385-E

Dear Mr. Terreni:

At the request of the Public Service Commission of South Carolina (the "Commission"), on February 14, 2008, representatives of Duke Energy Carolinas, Progress Energy Carolinas, and South Carolina Electric & Gas responded to the Commissioners' questions concerning net metering rates and riders previously filed with the Commission in response to Order No. 2007-626. The purpose of this letter and attachments is to further explain the two options proposed by Duke Energy Carolinas by providing a general description of the tariffs, a summary of the pricing and a sample bill calculation for a typical residential customer.

For Duke Energy Carolinas the options are (1) Rider NM, which must be used in conjunction with a time of use rate, and (2) Rider SCG, which can be used with time of use or non time of use rates. In the same way that standard rates are generally more attractive to smaller customers and time of use rates are attractive to larger customers, Rider SCG may be more appealing to small customers and Rider NM may appeal more to larger customers. The rate options are simply two different rate designs that accomplish the same purpose and can, in some cases, produce almost the same monthly bill.

Exhibit 1 shows the rate/rider prices side by side. Under a standard rate option, the energy charges are higher because they include the demand costs. Under the time of use rate option, the energy charges are lower because some of the demand costs are being determined

separately. For customers, who can use their own generation during peak hours or otherwise shift usage to off peak hours, real savings can be realized on time of use rates.

Exhibit 2 illustrates sample bills under both riders for a customer with a 2 kW photovoltaic system, whose actual usage is 1071 kWh, and where the PV system generates 263 kWh. The example shows that the basic costs are comparable (\$11.81 under SCG vs. \$11.59 under NM), as well as the total bill. For the calculation under the time of use rate, reasonable assumptions were made for the on-peak demand and ratio of on-peak kWh to off-peak kWh. As Exhibit 2 shows, there is less than \$1.00 per month difference in the average monthly bill. As additional information, the net monthly savings arising from the use of the customer generator is approximately \$15.00 per month under either option. To simplify the example, no excess kilowatt hours provided by the customer generator were assumed. If the customer generates excess, the net monthly bill could be reduced an additional 4 to 5 cents per excess kilowatt hour.

If you have any questions, please let me know.

Sincerely,

Catherine E. Heigel

cc: Parties of Record

Enclosures

DUKE ENERGY CAROLINAS RIDER SCG AND RIDER NM RATE OPTIONS FOR CUSTOMERS WITH SMALL GENERATORS WHO MEET THE INTERCONNECT STANDARD

SCHE	SCHEDULE RS (SC), Category 2, with Small Customer Generator Rider SCG	nerator Rider SCG			SCHEDULE RT(SC) With Net Metering Rider NM	Metering Rider NM
RATE RS2	CHARGES Basic Facilities Charge	All Months \$6.16	RATE RT		CHARGES Basic Facilities Charge	All Months \$11.59 per month
8CG 8CG	Supplemental BFC Standby Charge	\$3.75 \$.95 per kW of generator	<u>R</u>	On-Po	On-Peak Demand Charge	June-Sept Oct-May \$6.41 per kW \$3.21 per kW
RS2	First 1000 kWh per month Over 1000 kWh per month	All Months 7.2715 cents/kWh 8.7605 cents/kWh	RT	On-P _e	On-Peak Energy Charge Off-Peak Energy Charge	All Months 5.1767 cents/kWh 4.1969 cents/kWh
RATE		All Months	RATE		DITS	
KS2	First 1000 kWh per month Over 1000 kWh per month	(7.2715 cents/kWh) (8.7605 cents/kWh)	RT	On-Pc	On-Peak Demand Credit	(\$6.41 per kW) (\$3.21 per kW)
dd	When generator load exceeds customer load	All Months	<u> </u>	Š	فالمريس يستوموا بأمدوا من	All Months
<u>. d.</u>	Off-Peak Energy Credit	(3.90 cents/kWh)	몺	Off-Po	Off-Peak Energy Credit	(3.1767 cents/kWh) (4.1969 cents/kWh)
Note 1	Note 1: Credits for excess energy, if any will further reduce energy charges Note 2: Rider SCG can be used in conjunction with RS, RE, ES, or RT. The majority of Duke Energy residential customers are served on RS, category 2 which is used in this example.	ergy charges ES, or RT. The ved on RS, category 2	Note 1	I: If the and a to the	If the net energy component is a crecand and applied to following month. Accuto the Company June 1 each year.	Note 1: If the net energy component is a credit, the credit may be carried forward and applied to following month. Accumulated energy credits, if any, are donated to the Company June 1 each year.

DUKE ENERGY CAROLINAS SAMPLE BILLS UNDER RIDER SCG AND RIDER NM RATE OPTIONS

Customer energy requirements are 1071 kwh, peak demand 7 kW, reduced to 5.7 kW with 2 kW PV system, 20% of kWh are used on-peak, and PV system generates 263 kwh

SC	HED	SCHEDULE RS (SC), Category 2, with Small Customer		3enerator Rider SCG				SCHEDULE RT(SC) With Net Metering Rider NM	ering Rider		
									June-Sept		ö
RS2		Basic Facilities Charge	s	6.16		RT	ш	Basic Facilities Charge	s	11.59	s
SCG		Supplemental Basic Facilities Charge	€9	3.75)			
SCG		Standby Charge (2 kW system)	₩	1.90							
		Total Basic Facilities and Standby Charge		s s	11.81	RT	J	On-Peak Demand Charge			
	_	7					٣	(assume 7 kW without PV)	s	44.870	s
<u>.</u>		Ellergy Charges for 1071 KWII		6	1	1	•				
K32		FIRST 1000 KWN		1000 \$	72.71500	7	0	On-Peak Demand Credit			
		Over 1000 kWh		71 \$	6.21996		۳	(assume 5.7 kW with PV 1.3 KW reduction)	\$	(8.33300) \$	€₽
		Energy Credits for 263 kWh from PV system.				꿈	ш	Energy Charges for 1071 kWh (20% on-peak, 80% off-peak)	% off-peak)		
RS2		192 kWh at first 1000 kWH rate		192 \$	(13.96128)		O	On-peak energy	214 \$	11.07814	٤,
		71 kWh at over 1000 kWh rate		71 \$	(6.2200)		U		\$ 22	35.96743	44
						R	ш	Energy Credits for 263 kWh from PV system			
							O	On-peak energy credit	106 \$	(5.48730)	64
							O	Off-peak energy credit	157 \$	(6.58913)	€>
									↔	83.10	s
		MONTHLY BILL		₩	70.56		>	WEIGHTED AVERAGE MONTHLY BILL (SUMMER/WINTER)	IER/WINTE	<u>8</u>	44
]											

Static Facilities Charge	ILE RS (SC), Category 2, with Small Customer Generator Rider	ner Genera	ator Rider SCG	(5		SCHEDULE RT(SC) With Net Metering Rider NM	der NM		
\$ 6.16 RT Basic Facilities Charge \$ 3.75 \$ 1.90						ul	ne-Sept	ŏ	Oct - May
\$ 3.75 \$ 1.90 \$ 11.81 RT On-Peak Demand Charge (assume 7 kW without PV) \$ 72.71500 RT On-Peak Demand Credit 71 \$ 6.21996 RT Energy Charges for 1071 kWh (20% on-peak, 80% off-peak) On-peak energy 71 \$ (6.2200) RT Energy Credits for 263 kWh from PV system On-peak energy credit 196 \$ 0ff-peak energy credit 157 \$ \$ WEIGHTED AVERAGE MONTHLY BILL (SUMMER/WINTER	3asic Facilities Charge	s	6.16		RT		11.59	6	11.59
\$ 1.90 \$ 1.81 RT On-Peak Demand Charge (assume 7 kW without PV) \$ 72.71500 Theak Demand Credit (assume 5.7 kW with PV1.3 KW reduction) Theak G.21996 Theak energy Charges for 1071 kWh (20% on-peak, 80% off-peak) Theak G.2200) RT Energy Credits for 263 kWh from PV system On-peak energy credit Theak G.2200 Theak	Supplemental Basic Facilities Charge	ક્ર	3.75						
dby Charge \$ 11.81 RT On-Peak Demand Charge (assume 7 kW without PV) \$ 1000 \$ 72.71500 RT On-Peak Demand Credit (assume 5.7 kW with PV 1.3 KW reduction) \$ 1000 \$ 72.71500 RT On-Peak Demand Credit (assume 5.7 kW with PV 1.3 KW reduction) \$ 102 \$ (13.96128) On-peak energy On-peak energy 214 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Standby Charge (2 kW system)	€9	1.90						
1000 \$ 72.71500 T1 \$ 6.21996 T2 7.71500 T3 (assume 7 kW without PV) T1 \$ 6.21996 T3 (assume 5.7 kW with PV 1.3 KW reduction) \$ \$ 214 \$ 7.8 km (6.2200) T3 \$ (13.96128)	otal Basic Facilities and Standby Charge		49	11.81	RT	On-Peak Demand Charge			
1000 \$ 72.71500 RT On-Peak Demand Credit (assume 5.7 kW with PV 1.3 KW reduction) \$ \$ m PV system. 192 \$ (13.96128)							44.870	0	22.47
or 263 kWh from PV system. or 263 kWh from PV system. 192 \$ (13.96128)	Energy Charges for 1071 kWh								
or 263 kWh from PV system. 192 \$ (13.96128) 1000 kWh rate 71 \$ (6.2200) RT Energy Charges for 1071 kWh (20% on-peak, 80% off-peak) 0n-peak energy Off-peak energy Off-peak energy credit On-peak energy credit 106 \$ Off-peak energy credit 106 \$ Off-peak energy credit 106 \$ Off-peak energy credit 157 \$	irst 1000 kWh		1000 \$	72.71500	R	On-Peak Demand Credit			
or 263 kWh from PV system. 192 \$ (13.96128) 1000 kWH rate 71 \$ (6.2200) RT Energy Charges for 1071 kWh (20% on-peak, 80% off-peak) On-peak energy Off-peak energy credit On-peak energy credit 157 \$ WEIGHTED AVERAGE MONTHLY BILL (SUMMER/WINTER)	Over 1000 kWh		7.1 \$	6.21996		1.3 KW reduction)	(8.33300) \$	\$ (0	(4.1730)
1000 kWh rate 192 \$ (13.96128) On-peak energy 214 \$ (5.2200) 1000 kWh rate 71 \$ (6.2200) RT Energy Credits for 263 kWh from PV system 106 \$ RT Energy Credit On-peak energy credit 157 \$ A Off-peak energy credit 157 \$ A T0.56 WEIGHTED AVERAGE MONTHLY BILL (SUMMER/WINTER	Energy Credits for 263 kWh from PV system.				R	Energy Charges for 1071 kWh (20% on-peak, 80% off-pe	ak)		
1000 kWh rate	92 kWh at first 1000 kWH rate		192 \$	(13.96128)		On-peak energy 214 \$	11.07814	4	11.0781
RT Energy Credits for 263 kWh from PV system On-peak energy credit 165 \$ Off-peak energy credit 157 \$ WEIGHTED AVERAGE MONTHLY BILL (SUMMER/WINTER	1 kWh at over 1000 kWh rate		71 \$	(6.2200)			35.96743	جه جه	35.9674
On-peak energy credit 106 \$ Off-peak energy credit 157 \$ Off-peak energy credit 157 \$ **A 70.56 **A VEIGHTED AVERAGE MONTHLY BILL (SUMMER/WINTER					R	Energy Credits for 263 kWh from PV system			
Off-peak energy credit 157 \$ \$ 70.56 WEIGHTED AVERAGE MONTHLY BILL (SUMMER/WINTER							(5.48730) \$	\$ (0	(5.48730)
\$ 70.56 WEIGHTED AVERAGE MONTHLY BILL (SUMMER/WINTER)							(6.58913) \$	3) \$	(6.58913)
\$ 70.56				•	-	•	83.10	\$	64.86
·	MONTHLY BILL		€7	70.56		WEIGHTED AVERAGE MONTH! Y BILL (SLIMMER/W)	TER)	4	70 94
			•	2			· ·)	1